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ABSTRACT

This bibliography was prepared to provide a listing of a variety of curriculum materials, instructional materials, and references related to energy. Each entry includes: (1) Source, (2) Title, and (3) Comments on grade level and price when available. Materials are primarily selected for relevance to grades K-12. (RH)

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# A COMPOSITE OF ENERGY CURRICULUM GUIDES AND ENRICHMENT MATERIALS

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MOBILE COUNTY PUBLIC SCHOOLS
Mobile, Alabama 36601

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# A COMPOSITE OF ENERGY CURRICULUM GUIDES AND ENRICHMENT MATERIALS

Prepared by
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## PREFACE

It is almost superfluous to say that the international and national energy picture has grown more and more difficult for the laymen to comprehend during the last several years, and indeed within the last several months. The issues surrounding Project Independence, the depletion of oil and gas reserves, and the utilization of alternative energy sources seems to evoke further confusion and make the picture even more difficult to grasp. Nevertheless, teachers realize that it is not only timely, but absolutely necessary that the educational process assume responsibility for disseminating information to students that will provide them with the skills and background information necessary for wise decision making and future life style modifications. In order to accomplish this objective, students must be introduced to the various parameters of the energy story, including environmental effects of the various alternative sources, economic and social impacts, and technological developments.

With this in mind, the following composite of energy curriculum guides and enrichment materials was prepared for utilization by teachers as supplementary material or as integral parts of their core instructional program. The names and addresses of sources are provided to facilitate ordering of materials; however, teachers are encouraged to write for current prices prior to placing orders. This list should, by no means, be taken as a complete "bibliography", but rather as an initial tool in locating specific classroom materials. The list will be up-dated and redistributed at regular intervals, and all sources which may wish to have materials included are invited to submit them for consideration.

MAM, JMW
1975

A Composite of Energy
Curriculum Guides and
Enrichment Materials

Alabama Department of Education
Division of Vocational Education
and Community Colleges
Home Economics Education
Montgomery, AL 36104

Suggestions for Teaching Energy Conservation in Home Economics.

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American Association for the
Advancement of Science
1515 Massachusetts Ave., N.W.
Washington, DC 20005

Energy Education, a Newsletter on energy.

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American Nuclear Society
244 East Ogden Avenue
Hinsdale, IL 60521

Nuclear Power and the Environment - Questions and Answers, 1974.
Contains understandable and useful information and answers to commonly asked questions on nuclear power and the environment.

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American Petroleum Institute
1271 Avenue of the America's
New York, NY 10020

Earth Science and Energy (free)
The Energy Gap (free)

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Arizona Department of Education
1535 West Jefferson
Phoenix, AZ 85007

My Energy is Your Energy, February 1974, elementary energy guide.

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Center for Environmental Learning
Brevard County School
705 Avocado Avenue
Coca, FL 32922

Teachers' Environmental Resource Unit: Energy and Power.

Citizens' Advisory Committee on Environmental Quality
1700 Pennsylvania Avenue, N.W.
Washington, DC 20006

Citizens Action Guide to Energy Conservation, 1973. Booklet directed to citizen leaders, public officials, and others who are in a position to promote understanding of the need for energy conservation and to encourage its practice on a broad scale by the American people. Cost: $1.75
Available from: Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(Stock No. 4000-00-300)

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Columbia Gas System, Inc.
Department of Public Relations
20 Montchanin Road
Wilmington, Delaware 19807

An Action Program to Help Correct the National Energy Crisis. (free)

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Colorado Department of Education
Denver, CO 80203

A Teacher's Handbook on Energy, April, 1974.

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Consumers Power Company
Educational Services Program
212 West Michigan Avenue
Jackson, MI 49201

A Guide to Teaching Resources and Supplement, 1975-76 edition. Listing of resource materials and services offered free by Consumers Power Company to teachers and schools in all communities served by the Company.

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Dutchess County Board of Cooperative Educational Services
Route 1
Salt Point Turnpike
Poughkeepsie, NY 12601

Energy: Key to the Future, teaching techniques for the understanding and conservation of energy, K-12, February 1974.

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Edison Electric Institute
750 3rd Avenue
New York, New York 10017

Energy and the Quality of Life (free)

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Thomas Alva Edison Foundation
Cambridge Office Plaza, Suite 43
18280 West Ten Mile Road
Southfield, MI 48075

Edison Experiments, 1973. Text by Robert F. Schultz. Grades 5-10.

Edison Inventions and Related Projects, 1971. Text By Robert F. Schultz, Grades 5-10.

Electrical and Chemical Experiments...from Edison, 1973. Text by Robert F. Schultz, Grades 4-8.

Electrical Experiments You Can Do: From the Diary of Michael Faraday, 1974 by Robert F. Schultz, Grades 5-10.

Energy Conservation - Experiments You Can Do ... from Edison, 1974. Grades 5-10.

How to Build Five Useful Electrical Devices, 1971, Text by Robert Schultz.

Thomas Alva Edison's Associate, Lewis Howard Latimer, A Black Inventor: A Biography and Related Experiments you can do. 1973. Grades 5-10.

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Education Research System, Inc.
2121 Fifth Avenue
Seattle, WA 98121

Energy and Man's Environment, 1973. (an interdisciplinary guide containing activities for grades K-12 for the study of energy), edited by Thomas F. Ris, $2.95 plus postage and handling.

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Energy Conservation Research
9 Birch Road
Malvern, PA 19355

The Energy Challenge: What Can We Do? 1974.

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Enviro/Info
P. O. Box 115
Green Bay, Wisconsin 54305

Energy/Environment/Economy. An annotated Bibliography of Selected U. S. Government Publications concerning United States Energy Policy. 1973. Provides a selective listing of 109 U. S. Federal Government publications on the energy crisis. ($2.00)

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The Environment Center
The University of Tennessee
326 South Stadium Hall
Knoxville, TN 37916

A Teacher's Guide for Energy Conservation

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Environmental Alert Group
1543 North Martel Ave.
Los Angeles, CA 90046

Energy Options. Two parts - Part I is a brief overview of the current state of energy utilization. Part II deals with alternatives.

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Environmental Education Center
13 Veterans Drive
Oteen, NC 28805

America Runs on Electricity - The Energy Crisis, grades 5-9.

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Dr. John M. Fowler
Department of Physics and Astronomy
University of Maryland
College Park, MD 20742

Fowler, J.M., and K. E. Mervine. Energy and the Environment, an environmental resource packet published under a grant from the ESSO Education Foundation. January 1973.

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Harry Hyde, Jr., and Associates
Post Office Box 429
Bryn Mawr, PA 19010

The Energy Crisis: A Partial Bibliography, 1974. Compiled by Technical Publications Consultants. (mimeographed, 4 pages) Cost: Free.

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Iowa State Department of Public Instruction
Grimes State Office Building
Des Moines, IA 50319

Energy Materials, elementary and secondary levels.

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Iowa State University
Cooperative Extension Service
Ames, IA 50010

Energy Awareness, Iowa 4-H program materials on energy for 4-H leaders and junior, intermediate, and senior members. Prepared by Dr. Paul Barcus, Associate Professor in Engineering, ISU, 1974.

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Kingsport City Schools
Environmental Education Program
Kingsport, TN 37664

Energy Activities and Resources for the Secondary Student, 1974-75. Energy related materials for the secondary level (7-12) student, including several interdisciplinary activities, for the purpose of creating within the student an awareness of energy related problems through involvement.

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Massachusetts Audubon Society
Hatheway Environmental Education Institute
Lincoln, MA 01773

The Energy Crisis--Aids to Study, January 1974. Compiled for U.S. Office of Education. Bibliography of books, magazine articles, and curriculum aids which will be useful in beginning a study of the energy crisis.

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Montana State University
Department of Chemistry
Bozeman, MT 59715

Investigations in Atomic and Nuclear Science, by John R. Amend, 1969. Nuclear science module in a series of texts for high school level.

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National Education Association
1201 Sixteenth Street, NW.
Washington, DC 20036

Energy Choices for Now: Saving, Using, Renewing; an introduction to energy in the environment, 1974. Book for students and a teacher's manual.

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National Science Teachers Association
1742 Connecticut Avenue, NW.
Washington, DC 2009

Energy-Environment Source Book, Volume II, Energy, Its Extraction, Conversion and Use, by John M. Fowler, 1974.

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New Jersey Education Association
180 West State Street
Trenton, NJ 08608

Energy Crisis: A Teacher's Resource Guide, 1974, objectives, background content, activities, references, and examples of measuring devices for every classroom use.

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North Carolina Department of Public Instruction
Division of Science Education
Raleigh, NC 27611

Environmental Education - Strategies for Wise Use of Energy, an interdisciplinary guide for teachers at all levels in the elementary and secondary schools; certain portions could be used with adult groups, 1974.

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Northern States Power
414 Nicollet Mall
Minneapolis, Minnesota 55401

The ABC's of Electric Power fron the Atom (free)
Sixty Energy Savers that make Cents
The Electric Utility Industry (free)
Energy (free)
Check Yourself (free)
Why We Have A Fuel and Power Shortage (free)

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Division of Science Education
North Carolina State Department of Public Instruction
Raleigh, NC 27611

Environmental Education, K-3 Activities

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Oak Ridge Associated Universities
Special Training Division
Citozens' Workshops
Oak Ridge, TN 37830

Handbook for Citizens' Workshops on Energy and the Environment, 1973-74. Conducted by Oak Ridge Associated Universities for AEC.

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Office of Energy Research and Planning
State Capitol
Salem, Oregon 97310

Transition. Report on fourteen major existing and proposed energy delivery systems, advocating transition to a solar based economy.

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Oregon State Department of Education
942 Lancaster Drive, NE.
Salem, OR 97310

Energy Crisis, Teaching Resources. Prepared by: Wendell Curry, Dick Louthan, and Randi Douglas. Reprinted September 1974.

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Pacific Northwest River Basins Commission
Post Office Box 908
Vancouver, WA 98660

Review of Power Planning in the Pacific Northwest, 1973.

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Pennsylvania Department of Education
Box 911
Harrisburg, PA 17126

The Environmental Impact of Electrical Power Generation: Nuclear and Fossil, 1973. (provides an unbiased, straight-forward, and objective view of the advantages and disadvantages of the nuclear generation of electrical power)

A Teacher's Guide for the Environmental Impact of Electrical Power Generation: Nuclear and Fossil, 1973.

Nuclear Science: A High School Course, 1971, (provides a basic but comprehensive understanding of the atom in the light of modern knowledge)

Supplementary Materials for Nuclear Science, 1971, (designed to help clarify the above publication)

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Project U.S.E. (Urban/Suburban Environmental Education)
310 102nd Avenue, NE.
Bellevue, WA 98004

Curriculum Outline - Energy and Man's Environment, Grade 6, August 1973.

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Santa Barbara School Districts
Career Education Projects
309 Princeton Ave.
Santa Barbara, CA 93111

Mooy, Len and Don Stillman. Energy and Careers for Tomorrow, 1974. Cost: $1.00. Career Education Concept Series (elementary grade level)

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Scientists' Institute for Public Information
30 East Sixth-eighth Street
New York, NY 10021

Abrahamson, Dean E. Environmental Cost of Electrical Power, Environmental Workbook in SIPI series.

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Sears Roebuck and Company
Consumer Information Services
Department 703 -- Public Relations
Sears Tower
Chicago, IL 60684

The Energy Crisis in the Classroom, reprint of an article by Sally R. Campbell, Kaleidoscope, Spring 1974. Suggestions re energy conservation program for high school teachers.

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Solar Energy Society of America
P. O. Box 4264
Torrance, CA 90510

Energies, Monthly periodical containing a variety of recent information on energy knowledge and management.

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State of Tennessee
Department of Education
Division of Vocational Education
Nashville, TN 37219

in cooperation with

Tennessee Valley Authority
Division of Power Marketing
Electrical Demonstration Branch
Chattanooga, TN 37401

Farm Electricity. Fundamentals of electricity, wiring and materials, farm motors, and electrical controls prepared for vocational teachers. Published by Vocational Curriculum Laboratory, Box 114, Murfreesboro, TN 37130.

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Superintendent of Documents
Government Printing Office
Washington, DC 20402

Questions and answers about Nuclear Power, prepared by the Environmental Protection Agency. $.50 each, stock number 5500-0057.

Eleven Ways to Reduce Energy Consumption and Increase Comfort in Household cooling. $.30 each, Stock #030-0876

Oil Shale: A Potential Source of Energy. $.15 each, Stock #2401-1137.

Seven Ways to Reduce Fuel Consumption in Household Heating...through Energy Conservation. $.25 each, Stock #0303-0888.

The Economy, Energy, and the Environment. A Background Study. $.55 each

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Tennessee Valley Authority
Division of Power Marketing
Muscle Shoals, AL 35660

An Easy Understanding of Electricity, by James R. Carroll. A guide for teaching electricity experimentally.

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Tennessee Valley Authority
Division of Power Marketing
Chattanooga, TN 37401

Guide for Calculations of Electric Space Heating and Cooling, revised March 1974.

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Topeka Public and Parochial Schools
Environmental Education Project
1601 Van Vuren
Topeka, KS 66612

Energy, January 1974, (provides upper elementary students with basic information about: (1) what energy is, (2) where it comes from, (3) how we use it, and (4) ways we can more wisely use the energy available to us)

Energy and You, January 1974, (presents information regarding energy problems for Level II and III educable mentally retarded students)

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United Nations Association of the
United States of America, Inc.
833 United Nations Plaza
New York, NY 10017

Energy Outlook. A collection of reports on the energy outlook. Write for cost prior to ordering.

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University of Pittsburgh
Department of Physics
Pittsburgh, PA 15260

Energy: A Technological, Economic or Moral Crisis? by John H. Anderson

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University of the State of New York, The
State Education Department
Albany, NY 12224

Living Within Our Means: Energy and Scarcity, Environmental Education Instructional Activities, K-6

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U. S. Council on Environmental Quality
722 Jackson Place
Washington, DC 20006

Energy and the Environment/Electric Power, August 1973, 85¢.
Available at: U. S. Government Printing Office, Washington, DC 20402

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U. S. Environmental Protection Agency
Region I, New England Regional Office
Public Affairs Division
2203 John F. Kennedy Federal Building
Boston, MA 02203

Energy and the Environment: A Selected Bibliography for the Citizen, 1973. Cost: Free.

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Utilities Educational Services
Division of Custom Comics, Inc.
10 West Nineteenth Street
New York, NY 10011

Our Spaceship Earth - Needs More Fuel! 1974. Illustrated booklet on energy, grades 4-10, with teacher's guide.

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Washington Superintendent of Public Instruction
Old Capitol Building
Olympia, WA 98504

Create Tomorrow. . .Today, March 1974. Guidelines and instructional tools for use by teachers and administrators (elementary and secondary levels). This document was developed as part of the Energy Awareness Program, Washington State.

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Reports

Association of Physical Plant Administrators
of Universities and Colleges
Suite 510, One Dupont Circle
Washington, DC 20036

Energy Conservation Checklist for Universities and Colleges. Compiled by the Association in cooperation with National Association of College and University Business Officers, American Council on Education, and Association of American Medical Colleges. Cost: $1.50.

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Energy Policy Project of the Ford Foundation
Post Office Box 23313
Washington, DC 20024

Exploring Energy Choices, 1974. A preliminary report of the Ford Foundation's energy policy project. Cost: 75¢.

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Seattle City Light Company
City Light Building
1015 Third Avenue
Seattle, WA 98104

Power Generation Alternatives, 1972, Cost: $5.00.

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